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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/782,748

02/19/2004

Om P. Agrawal

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29416 7590 01/23/2007  
LATTICE SEMICONDUCTOR CORPORATION  
5555 NE MOORE COURT  
HILLSBORO, OR 97124-6421

EXAMINER

TAN, VIBOL

ART UNIT

PAPER NUMBER

2819

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

01/23/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/782,748	<b>Applicant(s)</b> AGRAWAL ET AL.	
	<b>Examiner</b> Vibol Tan	<b>Art Unit</b> 2819	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 19 February 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-16 is/are allowed.
- 6) ☒ Claim(s) 17-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 17-21 are rejected under 35 U.S.C. 102(e) as being anticipated by Trimberger (U. S. PAT. 6,084,429).

In claim 17, Trimberger teaches all claimed features in Figs. 4-7, a programmable logic device, comprising: a global switch matrix (GSM) (PIPs 21 and 40 read as global switch matrix); and a plurality of logic-containing segments (tiles 15) operatively coupled to the GSM, wherein each of the plurality of segments has within it and dedicated for intra-segment (within) communications (18) at least as many longlines (19) as there are macrocells (CLBs 16 read as macrocells that may comprise combinational logics) and I/O pads (inherent, not shown) in the segment.

In claim 18, Trimberger further teaches the programmable logic device of claim 17, wherein each of the plurality of segments (tile 15) has within it and dedicated for inter-segment communications (coupling over to another tile 15) at least as many longlines (19) as there are macrocells (CLBs 16 read as macrocells that may comprise combinational logics) and I/O pads (inherent, not shown) in the segment.

In claim 19, Trimberger further teaches the programmable logic device of claim 17, wherein the GSM has at least as many longlines (channels 40 having longlines 30) for inter-segment communications as do at least two segments (two tiles 15).

In claim 20, Trimberger teaches all claimed features in Figs. 4-7, a programmable logic device, comprising: a global switch matrix (GSM) (PIPs 21 and 40 read as global switch matrix); and a plurality of logic-containing segments (tiles 15) operatively coupled to the GSM, wherein each of the plurality of segments has within it and dedicated for inter-segment (18) communications at least as many longlines (19) as there are macrocells (CLBs 16 read as macrocells that may comprise combinational logics) and I/O pads (inherent, not shown) in the segment.

In claim 21, Trimberger teaches all claimed features in Figs. 4-7, a programmable logic device, comprising: a global switch matrix (GSM) (PIPs 21 and 40 read as global switch matrix); and a plurality of logic-containing segments (tiles 15) operatively coupled to the GSM, wherein the GSM has at least as many longlines (channels 40 having longlines 30) for inter-segment communications as do at least two segments (two tiles 15).

3. Claims 1-16 appear to comprise allowable subject matter.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vibol Tan whose telephone number is (571) 272-1811. The examiner can normally be reached on Monday-Friday (7:00 AM-4:30 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rexford Barnie can be reached on (571) 272-7492. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



**VIBOL TAN**  
**PRIMARY EXAMINER**